PENDING CLAIMS

1. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in a predetermined pattern and area, whereby the accommodation of the presbyopic eye increases via the movement of the ciliary body and zonular fiber connected to the lens of the eye, and said movement of the ciliary body is provided by the increase of the flexibility of said laser beam ablated scleral tissue which is filled in by sub-conjunctival tissue.

2. (Canceled)

3. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern includes at least 3 radial lines around the area of the cornea outside the limbus and each radial line has a dimension of about (0.1 - 1.0) mm in width and (2.0 - 5.0) mm in length.

4. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined area defined by the area outside the limbus and between two circles having diameter of about 10 mm and 18 mm.

5. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern includes at least 3 curved lines around the area of the cornea outside the limbus.

6. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern includes a dotted ring pattern around the area of the cornea outside the limbus and each dot has a size of about (0.1 - 2.0) mm in diameter.

7. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern is generated by a scanning mechanism.

8. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern is generated by a fiber-coupled device.

9. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern is generated by a translation device.

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10. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern is generated by a mask which is non-transparent to the said laser beam.

11. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said laser beam is a ultraviolet laser having a predetermined wavelength of about (0.15 - 0.36) microns.

12. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said laser beam is an infrared laser having a predetermined wavelength of about (0.9 - 6.0) microns.

13. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said laser beam is a short pulse solid state laser having a predetermined wavelength of about (0.5 - 1.4) microns and a pulse width of about one femtosecond to one nanoseconds.

14. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said laser beam is delivered to said predetermined area of the cornea by an optical fiber.

15. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said scleral tissue is ablated by said laser beam after the conjunctiva is open.

16. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said scleral tissue is ablated by said laser beam without opening the conjunctiva.

17. (Previously presented) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 12 in which said laser beam is tightly focused to a spot size of about (1-500) microns to selectively remove the sclera tissue underneath the conjunctiva layer.

18. (Previously presented) A laser beam ophthalmic surgery method for treating a presbyopic eye, comprising incising a portion of the scleral tissue of the eye through ablation to a depth of 300 - 630 microns and to a width of 0.1 - 2.0 millimeters to increase the accommodation of the eye by using an ablative laser which outputs pulses of light having a wavelength in the range of 150 - 350 nanometers or in the range of 2.6 - 3.2 microns, said pulses each having an energy of 0.1 - 30.0 milli-Joules and a pulse duration of 100 nanoseconds to 500 microseconds, said wavelength, energy and pulse duration being selected to incise the scleral tissue without causing significant thermal damage to the surrounding tissue.

19. (Previously presented) A laser beam ophthalmic surgery method as in Claim 18 wherein the accommodation of the eye is increased via the movement of the ciliary body and zonular fiber connected to the lens of the eye.

20. (Previously presented) A laser beam ophthalmic surgery method as in Claim 18 wherein the wavelength, energy and pulse duration are selected so as to not cut the scleral tissue through to the choroid layer.